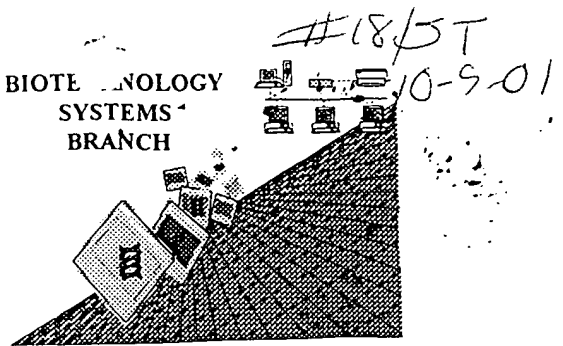


1602

RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/613,591 C
Source: OIPE
Date Processed by STIC: 03/15/2001

RECEIVED
OCT 05 2001
TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

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OCT 05 2001

TECH CENTER 1600/2900

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/613,591C

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 / Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0.
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/613,591C

DATE: 08/15/2001

TIME: 14:46:44

Input Set : A:\A-378CIP5.ST25.txt

Output Set: N:\CRF3\08152001\I613591C.raw

Does Not Comply
Corrected Diskette Needed

See page 6 of 7A

3 <110> APPLICANT: BOYLE, WILLIAM J.
 4 LACEY, DAVID LEE
 5 CALZONE, FRANK J.
 6 CHANG, MING-SHI
 7 SENALDI, GIORGIO
 9 <120> TITLE OF INVENTION: COMBINATION THERAPY FOR CONDITIONS LEADING TO BONE LOSS
 11 <130> FILE REFERENCE: A-378CIP5
 13 <140> CURRENT APPLICATION NUMBER: US 09/613,591C
 14 <141> CURRENT FILING DATE: 2000-07-10
 16 <150> PRIOR APPLICATION NUMBER: US 09/457,647
 17 <151> PRIOR FILING DATE: 1999-12-09
 19 <150> PRIOR APPLICATION NUMBER: US 09/350,670
 20 <151> PRIOR FILING DATE: 1999-07-09
 22 <150> PRIOR APPLICATION NUMBER: US 08/706,945
 23 <151> PRIOR FILING DATE: 1996-09-03
 25 <150> PRIOR APPLICATION NUMBER: US 08/577,788
 26 <151> PRIOR FILING DATE: 1995-12-22
 28 <160> NUMBER OF SEQ ID NOS: 168
 30 <170> SOFTWARE: PatentIn version 3.1
 32 <210> SEQ ID NO: 1
 33 <211> LENGTH: 36
 34 <212> TYPE: DNA
 35 <213> ORGANISM: Artificial Sequence
 37 <220> FEATURE:
 38 <223> OTHER INFORMATION: Not I restriction site
 40 <220> FEATURE:
 41 <221> NAME/KEY: misc_feature
 42 <222> LOCATION: (28)..(35)
 43 <223> OTHER INFORMATION: N = any random nucleic acid
 46 <400> SEQUENCE: 1
 W--> 47 aaaggaagga aaaaagcggc cgctacannn nnnnt 36
 50 <210> SEQ ID NO: 2
 51 <211> LENGTH: 16
 52 <212> TYPE: DNA
 53 <213> ORGANISM: Artificial Sequence
 55 <220> FEATURE:
 56 <223> OTHER INFORMATION: Not I restriction site
 58 <400> SEQUENCE: 2
 59 tcgacccacg cgcccg 16
 62 <210> SEQ ID NO: 3
 63 <211> LENGTH: 12
 64 <212> TYPE: DNA
 65 <213> ORGANISM: Artificial Sequence
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: Not I restriction site
 70 <400> SEQUENCE: 3
 71 gggtgcgcag gc 12

RAW SEQUENCE LISTING

DATE: 08/15/2001

PATENT APPLICATION: US/09/613,591C

TIME: 14:46:44

Input Set : A:\A-378CIP5.ST25.txt

Output Set: N:\CRF3\08152001\I613591C.raw

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74 <210> SEQ ID NO: 4
75 <211> LENGTH: 18
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Not I restriction site
82 <400> SEQUENCE: 4
83 tgtaaaacga cggccagt                                     18
86 <210> SEQ ID NO: 5
87 <211> LENGTH: 18
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Not I restriction site
94 <400> SEQUENCE: 5
95 caggaaacag ctatgacc                                     18
98 <210> SEQ ID NO: 6
99 <211> LENGTH: 20
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <223> OTHER INFORMATION: Not I restriction site
106 <400> SEQUENCE: 6
107 caattaaccc tcactaaagg                                   20
110 <210> SEQ ID NO: 7
111 <211> LENGTH: 23
112 <212> TYPE: DNA
113 <213> ORGANISM: Rattus rattus
115 <400> SEQUENCE: 7
116 gcattatgac ccagaaaccg gac                               23
119 <210> SEQ ID NO: 8
120 <211> LENGTH: 23
121 <212> TYPE: DNA
122 <213> ORGANISM: Rattus rattus
124 <400> SEQUENCE: 8
125 aggtagcgcc cttcctcaca ttc                               23
128 <210> SEQ ID NO: 9
129 <211> LENGTH: 30
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Oligonucleotide primer
136 <400> SEQUENCE: 9
137 gactagtccc acaatgaaca agtggctgtg                       30
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 45
142 <212> TYPE: DNA
143 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:

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RAW SEQUENCE LISTING

DATE: 08/15/2001

PATENT APPLICATION: US/09/613,591C

TIME: 14:46:44

Input Set : A:\A-378CIP5.ST25.txt

Output Set: N:\CRF3\08152001\I613591C.raw

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146 <223> OTHER INFORMATION: Oligonucleotide primer
148 <400> SEQUENCE: 10
149 ataagaatgc ggccgctaaa ctatgaaaca gcccgatgac cattc      45
152 <210> SEQ ID NO: 11
153 <211> LENGTH: 21
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Oligonucleotide primer
160 <400> SEQUENCE: 11
161 gcctctagaa agagctggga c      21
164 <210> SEQ ID NO: 12
165 <211> LENGTH: 21
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Oligonucleotide primer
172 <400> SEQUENCE: 12
173 cgccgtgttc catttatgag c      21
176 <210> SEQ ID NO: 13
177 <211> LENGTH: 24
178 <212> TYPE: DNA
179 <213> ORGANISM: Rattus rattus
181 <400> SEQUENCE: 13
182 atcaaaggca gggcatactt cctg      24
185 <210> SEQ ID NO: 14
186 <211> LENGTH: 24
187 <212> TYPE: DNA
188 <213> ORGANISM: Rattus rattus
190 <400> SEQUENCE: 14
191 gttgcactcc tgtttcacgg tctg      24
194 <210> SEQ ID NO: 15
195 <211> LENGTH: 24
196 <212> TYPE: DNA
197 <213> ORGANISM: Rattus rattus
199 <400> SEQUENCE: 15
200 caagacacct tgaagggcct gatg      24
203 <210> SEQ ID NO: 16
204 <211> LENGTH: 24
205 <212> TYPE: DNA
206 <213> ORGANISM: Rattus rattus
208 <400> SEQUENCE: 16
209 taacttttac agaagagcat cagc      24
212 <210> SEQ ID NO: 17
213 <211> LENGTH: 33
214 <212> TYPE: DNA
215 <213> ORGANISM: Rattus rattus
217 <400> SEQUENCE: 17
218 agcgcgggccg catgaacaag tggctgtgct gcg      33

```

RAW SEQUENCE LISTING

DATE: 08/15/2001

PATENT APPLICATION: US/09/613,591C

TIME: 14:46:44

Input Set : A:\A-378CIP5.ST25.txt

Output Set: N:\CRF3\08152001\I613591C.raw

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221 <210> SEQ ID NO: 18
222 <211> LENGTH: 31
223 <212> TYPE: DNA
224 <213> ORGANISM: Rattus rattus
226 <400> SEQUENCE: 18
227 agctctagag aaacagccca gtgaccattc c      31
230 <210> SEQ ID NO: 19
231 <211> LENGTH: 24
232 <212> TYPE: DNA
233 <213> ORGANISM: Rattus rattus
235 <400> SEQUENCE: 19
236 gtgaagctgt gcaagaacct gatg      24
239 <210> SEQ ID NO: 20
240 <211> LENGTH: 24
241 <212> TYPE: DNA
242 <213> ORGANISM: Rattus rattus
244 <400> SEQUENCE: 20
245 atcaaaggca gggcatactt cctg      24
248 <210> SEQ ID NO: 21
249 <211> LENGTH: 24
250 <212> TYPE: DNA
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 21
254 cagatcctga agctgctcag tttg      24
257 <210> SEQ ID NO: 22
258 <211> LENGTH: 33
259 <212> TYPE: DNA
260 <213> ORGANISM: Homo sapiens
262 <400> SEQUENCE: 22
263 agcgcggccg cggggaccac aatgaacaag ttg      33
266 <210> SEQ ID NO: 23
267 <211> LENGTH: 33
268 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
271 <400> SEQUENCE: 23
272 agctctagaa ttgtgaggaa acagctcaat ggc      33
275 <210> SEQ ID NO: 24
276 <211> LENGTH: 39
277 <212> TYPE: DNA
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Not I restriction site
283 <400> SEQUENCE: 24
284 atagcggccg ctgagcccaa atcttgtgac aaaactcac      39
287 <210> SEQ ID NO: 25
288 <211> LENGTH: 45
289 <212> TYPE: DNA
290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:

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RAW SEQUENCE LISTING

DATE: 08/15/2001

PATENT APPLICATION: US/09/613,591C

TIME: 14:46:44

Input Set : A:\A-378CIP5.ST25.txt

Output Set: N:\CRF3\08152001\I613591C.raw

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293 <223> OTHER INFORMATION: Not I restriction site
295 <400> SEQUENCE: 25
296 tctagagtcg acttatcatt tacccggaga caggagagg ctctt      45
299 <210> SEQ ID NO: 26
300 <211> LENGTH: 38
301 <212> TYPE: DNA
302 <213> ORGANISM: Mus musculus
304 <400> SEQUENCE: 26
305 cctctgagct caagcttccg aggaccacaa tgaacaag      38
308 <210> SEQ ID NO: 27
309 <211> LENGTH: 43
310 <212> TYPE: DNA
311 <213> ORGANISM: Mus musculus
313 <400> SEQUENCE: 27
314 cctctgcggc cgctaagcag cttattttca cggattgaac ctg      43
317 <210> SEQ ID NO: 28
318 <211> LENGTH: 38
319 <212> TYPE: DNA
320 <213> ORGANISM: Mus musculus
322 <400> SEQUENCE: 28
323 cctctgagct caagcttccg aggaccacaa tgaacaag      38
326 <210> SEQ ID NO: 29
327 <211> LENGTH: 24
328 <212> TYPE: DNA
329 <213> ORGANISM: Homo sapiens
331 <400> SEQUENCE: 29
332 tccgtaagaa acagcccagt gacc      24
335 <210> SEQ ID NO: 30
336 <211> LENGTH: 31
337 <212> TYPE: DNA
338 <213> ORGANISM: Mus musculus
340 <400> SEQUENCE: 30
341 cctctgcggc cgctgttgca tttcctttct g      31
344 <210> SEQ ID NO: 31
345 <211> LENGTH: 19
346 <212> TYPE: PRT
347 <213> ORGANISM: Mus musculus
349 <400> SEQUENCE: 31
351 Glu Thr Leu Pro Pro Lys Tyr Leu His Tyr Asp Pro Glu Thr Gly His
352 1          5          10          15
355 Gln Leu Leu
359 <210> SEQ ID NO: 32
360 <211> LENGTH: 21
361 <212> TYPE: DNA
362 <213> ORGANISM: Mus musculus
364 <400> SEQUENCE: 32
365 tcccttgccc tgaccactct t      21
368 <210> SEQ ID NO: 33
369 <211> LENGTH: 34

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09/613,591C

<210> SEQ ID NO 116
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<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: :
<400> SEQUENCE: 116

*Description of Antisense
Sequence is required in
field 223.*

ccggcggaca tttatcacac agcagctgat gactagtttc ttcatacataa tgaagatatt
60
ttggagcaaa agtttccata tgttattcct cctt
94

VERIFICATION SUMMARY

DATE: 08/15/2001

PATENT APPLICATION: US/09/613,591C

TIME: 14:46:45

Input Set : A:\A-378CIP5.ST25.txt

Output Set: N:\CRF3\08152001\I613591C.raw

L:47 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1

L:1461 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:116

L:1463 M:258 W: Mandatory Feature missing, <220> FEATURE:

L:1463 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: *Errored*